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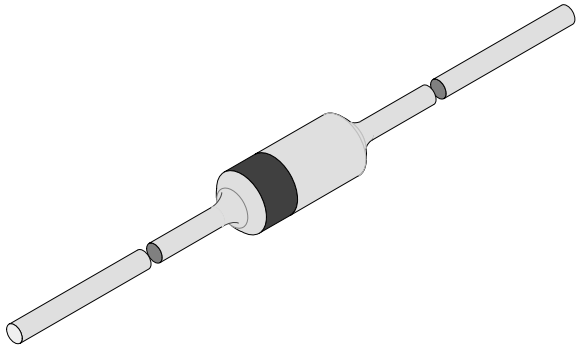
Fast Switching Diode

Features

- Fast switching speed
- High reliability
- High conductance
- For general purpose switching applications



94 9367

Order Instruction

Type	Type Differentiation	Ordering Code	Remarks
1N914	V_{RRM} = 75 V	1N914–TAP	Ammopack
		1N914–TR	Tape and Reel

Absolute Maximum Ratings

T_j = 25°C

Parameter	Test Conditions	Type	Symbol	Value	Unit
Non repetitive peak reverse voltage			V_{RM}	100	V
Repetitive peak reverse voltage			V_{RRM}	75	V
Working peak reverse voltage			V_{RWM}	75	V
DC blocking voltage			V_R	75	V
RMS Reverse voltage			$V_{R(RMS)}$	53	V
Forward current			I_F	300	mA
Average rectified current	half wave rectification with resistive load and f>50 MHz		I_{FAV}	200	mA
Non repetitive peak forward surge current	t=1s		I_{FSM}	1	A
	t=1µs		I_{FSM}	4	A
Power dissipation	l=4 mm, T_L25 ˚C		P_d	500	mW
Operating and storage temperature range			T_j, T_{stg}	–65...+175	˚C

Maximum Thermal Resistance

T_j = 25°C

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	l=4 mm, T_L=constant	R_{thJA}	300	K/W

Electrical Characteristics

T_j = 25°C

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F=10mA		V_F			1	V
Breakdown Voltage	I_R=100μA		V_R	100			V
Peak reverse current	V_R=75 V		I_R			5.0	μA
	V_R=20 V, T_j=150 °C		I_R			50	μA
	V_R=20 V		I_R			25	nA
Diode capacitance	V_R=0, f=1MHz		C_D			4	pF
Reverse recovery time	I_F=10mA to I_R=1mA, V_R=6 V, R_L=100Ω		t_{rr}			4	ns

Characteristics (T_j = 25°C unless otherwise specified)

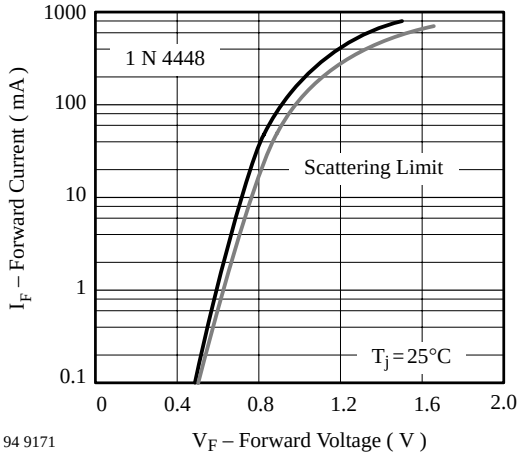


Figure 1. Forward Current vs. Forward Voltage

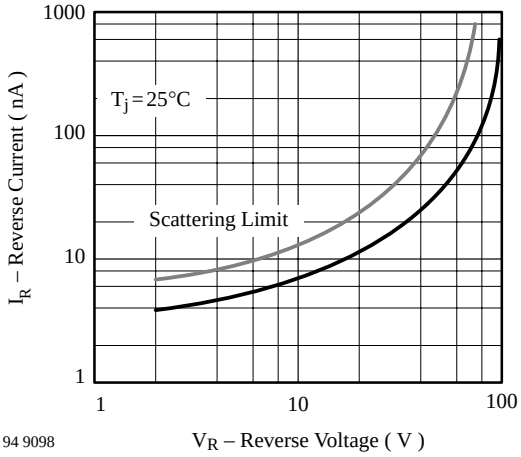


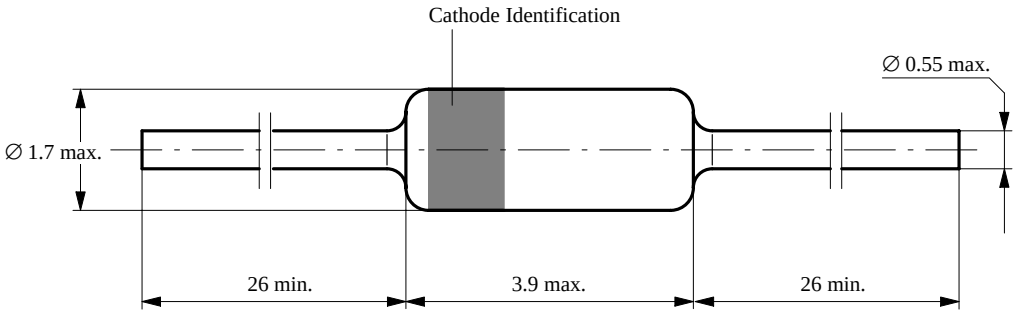
Figure 2. Reverse Current vs. Reverse Voltage

Dimensions in mm

technical drawings
according to DIN
specifications

94 9366

Standard Glass Case
54 A 2 DIN 41880
JEDEC DO 35
Weight max. 0.3 g



Case: DO35, Glass
Terminals: solderable per MIL–STD–202, method 208
Marking: Type number
Approx. weight: 0.13 grams

Ozone Depleting Substances Policy Statement

It is the policy of **Vishay Semiconductor GmbH** to

1. Meet all present and future national and international statutory requirements.

2. Regularly and continuously improve the performance of our products, processes, distribution and operating systems with respect to their impact on the health and safety of our employees and the public, as well as their impact on the environment.

It is particular concern to control or eliminate releases of those substances into the atmosphere which are known as ozone depleting substances (ODSs).

The Montreal Protocol (1987) and its London Amendments (1990) intend to severely restrict the use of ODSs and forbid their use within the next ten years. Various national and international initiatives are pressing for an earlier ban on these substances.

Vishay Semiconductor GmbH has been able to use its policy of continuous improvements to eliminate the use of ODSs listed in the following documents.

1. Annex A, B and list of transitional substances of the Montreal Protocol and the London Amendments respectively

2. Class I and II ozone depleting substances in the Clean Air Act Amendments of 1990 by the Environmental Protection Agency (EPA) in the USA

3. Council Decision 88/540/EEC and 91/690/EEC Annex A, B and C (transitional substances) respectively.

Vishay Semiconductor GmbH can certify that our semiconductors are not manufactured with ozone depleting substances and do not contain such substances.

We reserve the right to make changes to improve technical design and may do so without further notice.
Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer. Should the buyer use Vishay-Semiconductors products for any unintended or unauthorized application, the buyer shall indemnify Vishay-Semiconductors against all claims, costs, damages, and expenses, arising out of, directly or indirectly, any claim of personal damage, injury or death associated with such unintended or unauthorized use.

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